Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	ET Docket No. 00-258
Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems	)	
	)	
Petition for Rulemaking of the Cellular Telecommunications Industry Association Concerning Implementation of WRC-2000 Review of Spectrum and Regulatory Requirements for IMT-2000	)	RM-9920
Amendment for the U.S. Table of Frequency Allocations to Designate the 2500-2520/2670-2690 MHz Frequency Bands for the Mobile-Satellite Service	)	RM-9911

COMMENTS OF AT&T WIRELESS SERVICES, INC.

Pursuant to the Commission's Further Notice, AT&T Wireless Services, Inc. ("AWS") hereby submits its comments in the above-captioned proceeding.[1/]

INTRODUCTION AND SUMMARY

The Further Notice seeks comment on potential third-generation ("3G") allocations for radio spectrum in the following frequency bands: (1) unlicensed personal communications service ("UPCS") spectrum in the 1910-1930 and 2390-2400 MHz frequency bands; (2) multipoint distribution service ("MDS") spectrum in the 2150-2160 MHz frequency band; and (3) mobile satellite service ("MSS") spectrum in the 1990-2025 MHz and 2165-2200 MHz

1/ Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, FCC 01-224, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, ET Docket No. 00-258 (rel. August 20, 2001) ("Further Notice"). By Order Extending Comment Period, DA 01-2313, rel. Oct., 4, 2001, the Commission extended the deadline for the submission of these Comments until today's date.

frequency bands. As set forth more fully below, AWS strongly supports the Commission's efforts to identify suitable 3G spectrum, and urges the Commission to find a comprehensive 3G spectrum solution that results in the allocation of at least 160 MHz of paired spectrum that is consistent, to the extent possible, with spectrum identified internationally for 3G use[2/].

With respect to the 2150-2160 MHz band, AWS favors a 3G reallocation. The 2150-2160 MHz band does not have many of the incumbent relocation issues associated with the 2500-2690 MHz band. Further, the 2150-2160 MHz band, when combined with the 2110-2150 MHz and 2160-2165 MHz bands, and significant portions of the upper MSS bands, would create an adequately-sized contiguous block of spectrum that could be paired with other spectrum in the 1.7 GHz band to meet the Commission's goal of locating 160 MHz of 3G spectrum. Further, considering the existing and anticipated marketplace failures associated with MSS systems, the Commission should aggressively scale-back spectrum reserved for MSS uses. Instead, the Commission should respond to the needs of over 100 million domestic CMRS end users and allocate large portions of that MSS spectrum for 3G use.

I. THE COMMISSION SHOULD ADOPT A COMPREHENSIVE 3G STRATEGY

A. A Comprehensive Plan Is Needed To Solve The 3G Spectrum Shortage.

In making spectrum available for 3G services, the Commission must consider the frequency bands under consideration as part of a comprehensive plan. While a minimum of 160 megahertz has been identified by the ITU as necessary for the deployment of 3G services in the

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2/ AWS submitted comments in an earlier stage of this proceeding on February 22, 2001. See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, FCC 00-455, Notice of Proposed Rulemaking, ET Docket No. 00-258 (rel. Jan. 5, 2001) ("Notice"). Because, with one exception, the Commission has generally not abandoned any of the 3G candidate bands identified in the Notice, AWS generally incorporates those comments herein by reference. For the sake of brevity, particular references to those comments herein will be "AWS Initial Comments."

United States,[3/] it would not be sound public policy to ignore the CMRS industry's needs by piecing together small, disparate parcels of spectrum to achieve that goal. Because of the minimum size of the channels required, the need to pair spectrum, and the economics of manufacturing radio devices, large contiguous blocks of spectrum are a necessary element of any 3G solution. In addition, the guard bands that would be required to provide adequate protection from harmful out-of-band emissions would render small blocks of spectrum (under 10 MHz) unusable for robust 3G systems. Therefore, in evaluating the frequency bands specified in the Further Notice, the Commission must consider them contemporaneously with the larger blocks identified in the Notice, and not as separate, "stand-alone" pieces that may be made available in an uncoordinated fashion.

B. The Spectrum Bands Identified in the Further Notice are Only Additions to More Suitable Spectrum Already Identified by the Commission.

As the Further Notice makes plain, of the five frequency bands addressed in the Notice, only one, the 2500-2690 MHz band, no longer is being considered for 3G allocation.[4/] Each of the remaining four frequency bands identified in the Notice remains under active consideration. AWS, therefore, supports the Commission's proposal that the five bands specified in the Further Notice, totaling only 50 MHz,[5/] are only to be considered "additions" to the frequency bands already under consideration.[6/]

3/ Further Notice at n. 7.

4/ Further Notice at ¶¶ 5-7; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, FCC 01-256, First Report and Order and Memorandum Opinion and Order, rel. Sept. 24, 2001 ("MMDS/ITFS Order").

5/ While the Further Notice nominally seeks comment on the disposition of 110 MHz of radio spectrum, the Commission does not propose to allocate the entire 1990-2025 MHz and 2165-2200 MHz MSS frequency bands to 3G. Instead the Further Notice offers two proposals

To enable the CMRS industry to offer the feature-rich and bandwidth intensive 3G services that the marketplace demands, the Commission must ensure that sufficient spectrum is made available. At least 160 MHz of spectrum, issued in paired frequency bands consistent with international allocations, should be the Commission's target to achieve this goal.[7/] Thus, while the Further Notice is a positive step, none of the newly-identified frequency assignments should be considered *instead* of the bands considered in the Notice. While AWS recognizes the difficult choices that must be made with respect to scarce spectrum, it urges the Commission to make every effort not to short-change the hundreds of millions of CMRS users worldwide that depend on service providers such as AWS.

C. The Non-MSS Bands Identified In the Further Notice Are Insufficient.

The UPCS and "lower" MDS frequency assignments identified in the Further Notice, while certainly useful for the CMRS industry, are not 3G solutions in and of themselves. These frequency assignments, standing alone, are not paired, and are not consistent with current international allocations. Further, considered alone, they are simply too small to make any meaningful difference in the CMRS industry's needs.[8/] Thus, as the Further Notice suggests, and as discussed above, unless other allocation decisions are made in conjunction with the reallocation of the UPCS and lower MDS channels, these bands will not be useful for meeting industry's 3G needs.

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that would result in only 10 MHz of that spectrum being made available for 3G. Further Notice at ¶ 27.

6/ Further Notice at ¶ 8.

7/ AWS Initial Comments at 3-6 (describing WRC-2000 recommendations and AWS' estimated need for additional spectrum).

8/ AWS Initial Comments at 7 (citing a individual carrier's need for 10/10 MHz channel pairs).

When considered together with the other bands identified in the Notice, AWS believes that a reallocation of the 2150-2160 MHz band to 3G use would serve the public interest. Most important, reallocation of the 2150-2160 MHz band for 3G would result in more contiguous spectrum for advanced wireless services. As explained in the Notice, the 2110-2150 MHz and 2160-2165 MHz bands already have been identified by the Commission for reallocation to emerging technologies, and the lower MDS channels fall right between these bands.[9/] Moreover, if together with this MDS band, the Commission reallocates MSS spectrum for CMRS (as numerous commenters have urged), it would be able to provide up to 90 MHz of contiguous spectrum to that could be paired with comparable spectrum in the 1.7 GHz band. Such an allocation would meet the identified needs for additional 3G spectrum. Failure to reallocate the 2150-2160 MHz band for 3G would therefore result in a missed opportunity of immense proportions.

Further, while the 2150-2160 MHz band is used by existing licensees today, reallocation of this spectrum for 3G uses would not implicate many of the troublesome "incumbent relocation" problems considered by the Commission in its deliberations relating to the suitability of the 2500-2690 MHz for 3G reallocation. For example, the 2150-2160 MHz band contains less than 10 percent of the spectrum in the "upper" MDS/ITFS band, with far fewer incumbent licensees and operational systems. Relocation concerns were a major reason why the Commission removed the 2500-2690 MHz band from 3G consideration.[10/] Similarly, because there are no ITFS licensees in the 2150-2160 MHz band, reallocation of this band for 3G would

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9/ Notice at ¶ 50.

10/ MMDS/ITFS Order at ¶ 28.

not implicate the issues raised previously about disruption of ITFS educational activities.[11/] In light of the efficiencies that would be lost by preserving this small island of spectrum in an otherwise contiguous 3G band, it is plain that reallocation of the 2150-2160 MHz frequency band is the correct choice.

D. The Commission's Allocation and Auction Timing Should Be Coordinated.

As important as which frequency bands are allocated for 3G is the timing for when the bands would be auctioned and become available. AWS recommends that the Commission's decision to reallocate a particular portion of spectrum for 3G be accompanied by a decision temporarily reserving that spectrum for suitable pairing or availability of paired or sufficient adjacent spectrum to make the 3G reallocation meaningful. The Commission has previously endorsed this approach.[12/] Interim auctions of portions of newly-reallocated 3G spectrum, such as the 2160-2165 MHz frequency band or portions of the MSS band, for example, would simply confuse the marketplace and create incentives for strategic behavior. This is especially the case when some of the frequency allocations at issue may be dependent on existing licensees' compliance (or more likely in the case of MSS licensees, non-compliance) with Commission-mandated performance requirements. Without a clear, comprehensive plan defining when all the reallocated spectrum will be auctioned and made available, the market will not be able to adequately value these small spectrum pieces. Accordingly, if necessary, the Commission should coordinate with Congress to ensure that certain administrative provisions of the 1997

11/ MMDS/ITFS Order at ¶ 13 (describing concerns of ITFS licensees associated with involuntary relocation to other frequency bands).

12/ Using Market-Based Spectrum Policy To Promote the Public Interest, FCC White Paper, rel. Jan. 1997 ("[T]o the extent that the best use for spectrum in some circumstances is for it to lie temporarily fallow, we believe that the competitive market can reliably identify those situations.").

Budget Act do not undermine the Commission's role in ensuring a coordinated 3G policy.[13/] The Commission should not, for example, auction the 2110-2150 MHz frequency band without first resolving the status of the 2150-2160 MHz, 2160-2165 MHz, and 2165-2200 MHz frequency bands.

II. MSS FREQUENCY ASSIGNMENTS SHOULD BE CAREFULLY SCRUTINIZED

The Further Notice seeks comment on the reallocation of 10-14 MHz of MSS spectrum for 3G uses.[14/] The Commission's current proposal appears intended to make available 5 MHz at 2165-2170 MHz for inclusion in a frequency band that commences at 2110 MHz.[15/] AWS supports the Commission's proposal, but urges the Commission to take a more aggressive approach to the MSS allocation, with the goal of achieving large paired blocks of spectrum for 3G use.[16/]

The Commission should logically view all MSS system proponents as a "class" -- no matter what frequencies they may use -- and conclude that most systems will not succeed. Aside from the 2 GHz MSS systems that have not commenced operations, existing MSS entrants have encountered great difficulty attracting subscribers and generating revenue compared to CMRS licensees. For example, Globalstar, L.P. launched services over two years ago, but recently reported second quarter revenues of only $2.3 million for 55,000 subscribers, or only about $14

13/ Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997).

14/ Further Notice at ¶ 24.

15/ Further Notice at ¶ 42, n. 97.

16/ AWS is separately and simultaneously herewith submitting comments in the Commission's IB Docket No. 01-185 rulemaking proceeding, which addresses requests by certain MSS providers to offer terrestrial services. As set forth in its those comments, AWS generally opposes Commission actions that would permit MSS licensees to provide terrestrial services in competition with CMRS providers after those companies obtained free spectrum premised on a satellite offering.

per month per subscriber for that quarter.[17/] By way of comparison, in 1994, the Commission predicted that there would be 54 million domestic CMRS users by the year 2000.[18/] CMRS end user growth, however, was more than twice as explosive as the agency envisioned, with the industry serving approximately 122 million customers today.[19/] The MSS industry has not even added 1 percent of that total. The marketplace has clearly spoken and the Commission's allocation decisions should respond to end user demand, not MSS licensees' unrealistic promises.

More significantly, two MSS licensees have recently acknowledged that, absent a gift of free spectrum to permit them to compete in the terrestrial rather than the satellite marketplace, they will not survive.[20/] The Commission should not close its eyes to these marketplace realities. Based on the ample evidence before it, the Commission has no reason to sit back and wait for launches to fail and MSS licensees to miss regulatory milestones. Rather, the Commission should reverse its judgment made more than four years ago -- which was generally predictive in

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17/ See http://www.globalstar.com/EditWebNews/208.html.

18/ CMRS Third Report and Order, 9 FCC Rcd 7988, ¶ 54 (1994).

19/ See "GSA Says More Research Needed: None," Network World, July 2, 2001; Margaret McHugh, "Stocks Get Boost with First Hints of Growing Trend," Newark Star-Ledger, Sept. 19, 2001; Sixth Annual CMRS Report, FCC 01-92, § C (rel. July 17, 2001).

20/ See Letter from Lawrence H. Williams, New ICO Global Communications (Holdings) Ltd. to FCC Chairman Michael Powell, Mar. 8, 2001, at 1-2 ("[D]ue to the failures of early MSS projects and the instability of the telecom and satellite financial markets," the viability of the MSS industry "is in dire jeopardy") (emphasis omitted); In the Matter of Motient Services, Inc. and Mobile Satellite Ventures Subsidiary, LLC, Application for Assignment of Licenses and Authority to Launch and Operate a Next-Generation Mobile Satellite Service System, File No. SAT-ASG-20010302-0017, at 12-13 (filed Jan. 16, 2001).

nature[21/] -- that MSS systems will require a full 35/35 MHz pair.[22/] Reallocation of all, or at least a portion of, the 2 GHz MSS band to terrestrial services, with licenses distributed to all interested parties through competitive bidding would result in a far more efficient use of scarce spectrum and all the corresponding public interest benefits that would entail.

If notwithstanding the marketplace inefficiencies it would introduce, the Commission decides not to reallocate the MSS bands for 3G use, it should, at the very least, commence assignment of frequencies to MSS licensees "from the top down" to ensure that the lower portion of the "downlink" 2165-2200 MHz frequency band is ready for immediate reallocation to 3G services when the spectrum becomes available. As AWS pointed out to the Commission in its challenge to the licensing proceeding that awarded the MSS licenses, the Commission's MSS licensing decision "orphans" small blocks of otherwise useful spectrum, basically preserving it for MSS use.[23/] The Commission should therefore carefully structure its MSS licensing regulations and also have in place enforceable measures that will enable rapid reallocation to 3G of spectrum that is abandoned by MSS entrants.

21/ See Bechtel v. FCC, 957 F.2d 873, 881 (D.C. Cir. 1992) (subsequent procedural history omitted) (The FCC's "wide latitude to make policy . . . implies a correlative duty to evaluate its policies over time to ascertain whether they work -- that is, whether they actually produce the benefits the Commission originally predicted they would.").

22/ See Amendment Of Section 2.106 Of The Commission's Rules To Allocate Spectrum At 2 GHz For Use By The Mobile-Satellite Service, ET Docket No. 95-18, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, ¶¶ 13-15 (1997) (describing reasons why Commission allocated 70 MHz of MSS spectrum in the 2 GHz frequency band).

23/ See Application for Review of AT&T Wireless Services, Inc. *et al.*, DA 01-1631-1638, filed Aug. 16, 2001.

CONCLUSION

For the foregoing reasons, AWS supports the allocation of sufficient paired spectrum for 3G use, which should be, to the extent feasible, (i) harmonized with spectrum use globally, and (ii) coordinated to ensure a smooth 3G transition.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, Tawana Simpson, hereby certify that on this 22nd day of October, 2001, a copy of the foregoing Comments of AT&T Wireless Services, Inc. were sent by U.S. mail to the following:

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